

Work Order ID 92317

Friday, October 26, 2012 1:18:35 PM

92317

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Item ID: 649.5010E Accept *N900040100* Setup Start *NS1*
Revision ID: Stop *NS2*
Item Name: Deflector
Start Date: 10/26/2012 Start Qty: 120.00 *120* Cust Item ID:
Required Date: 12/3/2012 Req'd Qty: 120.00 *120* Customer:

Reference:

Approvals: Process Plan: PL Date: 12-10-26 Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Work Order ID 92315
Friday, October 26, 2012 11:34:20 AM

92315

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Item ID: 649.5010E Accept *N900040100* Setup Start *NS1*
Revision ID:
Item Name: Deflector Step *NS2*
Start Date: 10/26/2012 Start Qty: 120.00 *120* Cust Item ID:
Required Date: 12/3/2012 Req'd Qty: 120.00 *120* Customer:
Reference:
Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Stop *NR2*
Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
100 *100*	PURCHASING Purchasing Purchasing	0.00							
110 *110*	Receive & Inspect for Damage & Mat'l Certs Packaging Packaging	0.00							
120 *120*	QC6- Inspect dimensions to drawing QC Quality Control	0.00							

Memo
Issue P/O: _____
a)Description: EXTRUSION FOR DEFLECTOR
c) Material: 7075-T6
f) Material certification required

Memo
Ensure material certification is attached

Memo
Ensure Material certification comply to Dwg 649.5000

Work Order ID 92317

92317

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Item ID:	649.5010E	Accept	*N900040100*	Setup	Start	*NS1*	
Revision ID:				Stop		*NS2*	
Item Name:	Deflector						
Start Date:	10/26/2012	Start Qty:	120.00	*120*	Cust Item ID:		
Required Date:	12/3/2012	Req'd Qty:	120.00	*120*	Customer:		
Reference:							
Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:	Stop		*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* Packaging	Identify as per dwg & Stock Location: <u>MFT</u>	0.00	<i>13-01-04</i>						
	Memo	0.00							
140 *140* QC	QC21- Final Inspection - Work Order Release	0.00							<i>13/11/10 JH</i>
	Memo	0.00							

fl 13-01-4

Picklist Print

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Friday, October 26, 2012 1:19:04 PM

Work Order ID: 92317

92317

Parent Item: 649.5010E

649 5010F

Parent Item Name: Deflector

Start Date: 10/26/2012

Required Date: 12/3/2012

Start Qty: 120.00

Required Qty: 120.00

Comments: IPP REV:A NEW ISSUE 12-10-26 JLM VERIOFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
649.5010P *649 5010P* Deflector		Purchased	No			f		0.0000	**	120		10/31/13	134

APICAL
INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO. 03693				SHEET 1 OF 1	
DWG NO. 649.5000		REV: C	PREPARED BY B. PETERS	DATE: 11/14/12 EFFECT ON DWG <input type="checkbox"/> INC. <input checked="" type="checkbox"/> UNINC.	
DWG TITLE: DEFLECTOR					
APPROVED BY: <i>JAC</i>	ENGR: <i>David Barker</i>	MFG: <i>David Barker</i>	EFF: NEXT ORDER		
TRANSACTION CODES (TC) A-ADD C-CREATE R-REVISE D-DELETE	REASON: ADDED ALTERNATE MATERIAL.			ECR: D-12-001	

IS

⚠ PRIMARY MATERIAL: 7075-T651 ALUMINUM PER AMS-QQ-A-250/12.
ALTERNATE MATERIAL: 7075-T6511 ALUMINUM PER AMS-QQ-A-200/11.

SHEET 1, ZONE A2 IS:

F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL	SPECIFICATION
DOCUMENTS EFFECTED:	<input type="checkbox"/> RFMS <input type="checkbox"/> MDL <input type="checkbox"/> INSTALL INSTRUC <input type="checkbox"/> ICA <input type="checkbox"/> BOM	<input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR	CHANGE CATEGORY	<input type="checkbox"/> DER REVIEW REQUIRED	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	

1 1 2 3 4 5 6 7 8
 THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF
 APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT
 THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

REVIEWS			
REV	DESCRIPTION	DATE	APPROVED
	LAST PROTOTYPE P/N/REV		N/A
H/C	INITIAL RELEASE	11-02-11	P. BRAVO
A	INCORPORATED ECN:03022 AND 03478	04-16-12	P. BRAVO
B	INCORPORATED ECN:03024	04-09-12	P. BRAVO
C	INCORPORATED ECN:03571	05-22-12	P. BRAVO

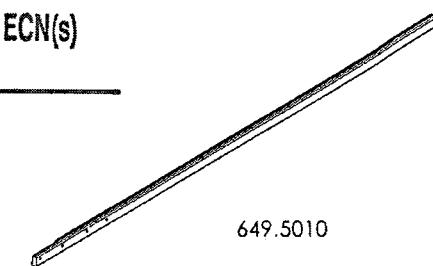
NOTES: UNLESS OTHERWISE SPECIFIED

A 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12.
 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK:
 PRETREAT PRC-DESO TO PR-148 ADHESION PROMOTER;
 PRIME IAW MIL-P-2337J TYPE I CLASS N: 1-2 MIL MAX.

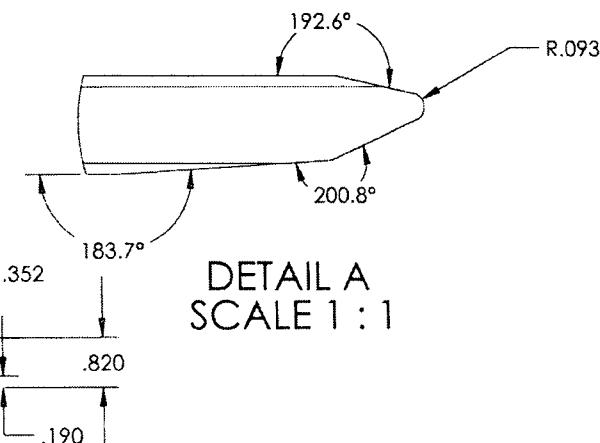
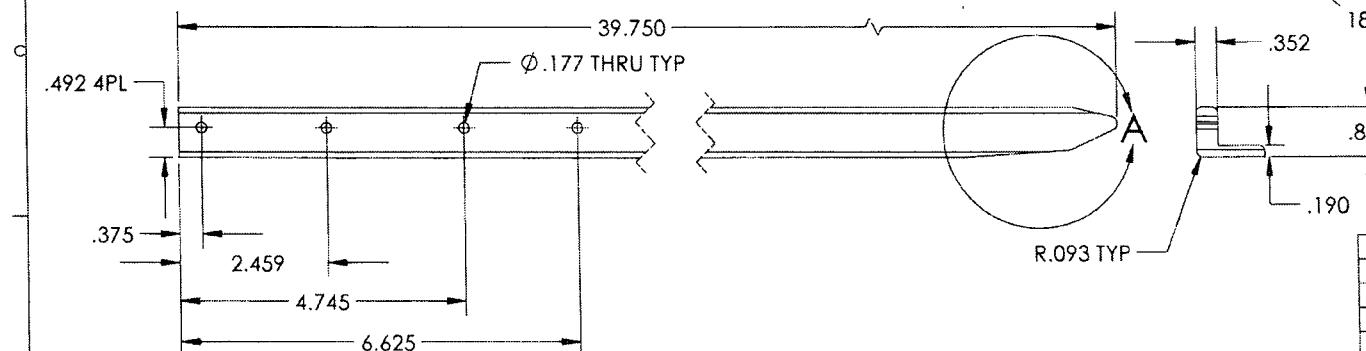
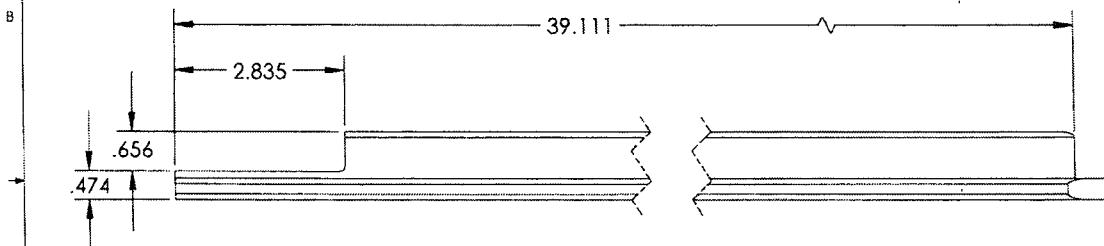
3. DE BURR AND BREAK ALL SHARP EDGES.
 4. IDENTIFY IAW MPP-120, LASER ETCH P/N AND REVISION, 12 PT. CENTURY GOTHIC.
 5. ALL DIMENSIONS SHOWN PRIOR TO FINISH.
 6. PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 649.5010 DEFLECTOR.SLDPRT, LAST MODIFIED 04-16-12.
 7. PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 649.5012 DEFLECTOR.SLDPRT, LAST MODIFIED 11-03-11.
 8. PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 649.5013 DEFLECTOR.SLDPRT, LAST MODIFIED 04-16-12.

UNINCORPORATED ECN(s)

03693



649.5010



DETAIL A
 SCALE 1:1

QTY	FIND #	PART #	DESCRIPTION	MATL	SPEC.
4	649.5013	DEFLECTOR	△	△△	
3	649.5012	DEFLECTOR	△	△△	
2	649.5011	DEFLECTOR	△	△	
1	649.5010	DEFLECTOR	△	△△	

PARTS LIST

ORIGINAL DATE	11-02-11
DRAWN BY	P. BRAVO
DESIGNED BY	P. BRAVO
SPONSOR APPROVAL	P. BRAVO
11-02-11	
CONTRACT NO.	
UNLESS OTHERWISE SPECIFIED	
DIMENSIONS ARE IN INCHES	
2 PLACE DECIMALS ± .03	
3 PLACE DECIMALS ± .010	
4 PLACE DECIMALS ± .001	

APICAL INDUSTRIES
 2608 TEMPLE HEIGHTS DR.
 OCEANSIDE, CA 92054-3512 (760)724-5300

DEFLECTOR

REV: C

B 07/16 DWG. NO. 649.5000

SCALE: NONE SHEET 1 OF 4

SHIPPER NO.
406617-1

UACPART NO.
66761

UNIVERSAL ALLOY CORPORATION
180 LAMAR HALEY PKWY CANTON, GA USA 30114
(770) 479-7230

PRODUCTION LOTS C556056 @11 PCS

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DART AEROSPACE
1270 ABERDEEN
HAWKESBURY, ONTARIO CN, K6A 1K7

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DART AEROSPACE
1270 ABERDEEN
HAWKESBURY, ONTARIO CN, K6A 1K7

27/320

CUSTOMER'S P.O. NO. PO18262 item 4		ORDER PLACED BY BRIGITTE GOLDEN		CUSTOMER'S PART NUMBER 649.5010-EXT ALUMINUM EXTRUSION	
TERMS NET 60	ALLOY 7075 T6511	SPECIFICATION NO. AMS-QQ-A-200/11 REV. N/C			
SHIP VIA JOURNEY		DATE SHIPPED 12/13/2012	FREIGHT CHARGES PREPAID <input type="checkbox"/> COLLECT <input checked="" type="checkbox"/>	SHIPMENT PARTIAL <input type="checkbox"/> COMPLETE <input checked="" type="checkbox"/>	CERTIFICATIONS ATTACHED <input checked="" type="checkbox"/> TO FOLLOW <input type="checkbox"/>

QUANTITY SHIPPED

FEET 132	PIECES X LENGTH 11 X 144.	NET PER PC 6.64	NET POUNDS 73	GROSS POUNDS 104	BOX 1 bundle of 1 Standard US box
RECEIVED BY <input checked="" type="checkbox"/>		DATE	TIME		

UNIVERSAL ALLOY CORPORATION ACCEPTS NO RESPONSIBILITY FOR ERROR IN SHIPMENT IF YOU FAIL TO NOTIFY US WITHIN 3 DAYS OF RECEIPT. NO REJECTED MATERIAL WILL BE ACCEPTED FOR CREDIT OR REPLACEMENT AFTER 30 DAYS FROM DATE OF RECEIPT.

SHIPPER NO.
406617-1

UACPART NO.
66761

UNIVERSAL ALLOY CORPORATION
180 LAMAR HALEY PKWY CANTON, GA USA 30114
(770) 479-7230

PRODUCTION LOTS C556056 @11 PCS

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DART AEROSPACE
1270 ABERDEEN
HAWKESBURY, ONTARIO CN, K6A 1K7

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DART AEROSPACE
1270 ABERDEEN
HAWKESBURY, ONTARIO CN, K6A 1K7

27/320

CUSTOMER'S P.O. NO. PO18262 item 4		ORDER PLACED BY BRIGITTE GOLDEN		CUSTOMER'S PART NUMBER 649.5010-EXT ALUMINUM EXTRUSION	
TERMS NET 60	ALLOY 7075 T6511	SPECIFICATION NO. AMS-QQ-A-200/11 REV. N/C			
SHIP VIA JOURNEY		DATE SHIPPED 12/13/2012	FREIGHT CHARGES PREPAID <input type="checkbox"/> COLLECT <input checked="" type="checkbox"/>	SHIPMENT PARTIAL <input type="checkbox"/> COMPLETE <input checked="" type="checkbox"/>	CERTIFICATIONS ATTACHED <input checked="" type="checkbox"/> TO FOLLOW <input type="checkbox"/>

QUANTITY SHIPPED

FEET 132	PIECES X LENGTH 11 X 144.	NET PER PC 6.64	NET POUNDS 73	GROSS POUNDS 104	BOX 1 bundle of 1 Standard US box
RECEIVED BY <input checked="" type="checkbox"/>		DATE	TIME		

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UNIVERSAL ALLOY CORPORATION
180 LAMAR HALEY PKWY CANTON, GA 30114 (770) 479-7230

EXTRUSION MILL CERTIFICATE OF CONFORMANCE
INSPECTION AND TEST REPORT

CUSTOMER	DART AEROSPACE LTD		
PURCHASE ORDER	PO18262 item 4	DATE	12/07/12
ORDER NUMBER	406617	PART NO.	649.5010-EXT rev C
SPECIFICATIONS	AMS-QQ-A-200/11 REV. N/C	MATERIAL	7075-T6511

MECHANICAL PROPERTIES

SAMPLE OR LOT	TEST DIRECTION	TEST LOCATION	TENSILE STRENGTH KSI	YIELD STRENGTH KSI	ELONGATION %
C556056	L	Rear	88.9	81.4	13.0

S13/01/03

MANUFACTURED IN THE U.S.A.

CHEMICAL COMPOSITION LIMITS

ALLOY NOS	SI	FE	CU	MN	MG	CR	ZN	TI	EACH	OTHERS	TOTAL
7075	0.40	0.50	1.2-2.0	0.30	2.1-2.9	0.18-0.28	5.1-6.1	0.20	0.05	0.15	

THIS IS TO CERTIFY THAT THE MATERIAL APPLIED TO THE ABOVE ORDER COVERED BY THIS REPORT HAS BEEN INSPECTED IN ACCORDANCE WITH THE SPECIFICATIONS DESCRIBED FORMING A PART OF THIS ORDER AND THAT REPRESENTATIVE MATERIAL HAS BEEN TESTED AND FOUND TO MEET THE APPLICABLE REQUIREMENTS. FURTHER SHOWN ARE THE COMPOSITION LIMITS AND MECHANICAL PROPERTY TEST RESULTS. DOCUMENTATION VERIFYING CONFORMANCE TO THESE REQUIREMENTS IS ON FILE AND SUBJECT TO EXAMINATION.

PERCENT MAXIMUM UNLESS SHOWN OTHERWISE
REMAINDER ALUMINUM

UNIVERSAL ALLOY CORPORATION



Mark Briguglio, Metallurgical Lab Manager
QUALITY ASSURANCE DEPARTMENT



556056T04



Universal Alloy Corporation

Invoice Number
634611

180 Lamar Haley Pkwy
Canton, GA. 30114-8018
770.479.7230 - 888.479.7230 - Fax 770.479.7198

Please Remit To:
P.O. Box 951501
Dallas, TX 75395-1501

Please Send All Correspondence to: 180 Lamar Haley Pkwy. Canton, GA 30114

Sold To:
DART AEROSPACE
1270 ABERDEEN

HAWKESBURY, ONTARIO, CN K6A 1K7

Shipped To:
DART AEROSPACE
1270 ABERDEEN

HAWKESBURY, ONTARIO, CN K6A 1K7

27/320

Date 12/13/2012	Shipped Via JOURNEY FREIGHT	Shipper No. 406617-1	Date Shipped 12/13/2012	Terms NET 60
Purchase Order Number PO18262 4		Part Number 649.5010-EXT Rev C		
QUANTITY	DESCRIPTION		UNIT PRICE	AMOUNT
132.000	ALUMINUM EXTRUSION		13.380/FT	\$1,766.16
NO REJECTED MATERIAL WILL BE ACCEPTED FOR CREDIT OR REPLACEMENT AFTER 30 DAYS FROM DATE OF RECEIPT. UNIVERSAL ALLOY CORP. ACCEPTS VISA, MASTERCARD, AND AMERICAN EXPRESS.				\$1,766.16

**TOTAL
U.S. Dollars**

CUSTOMER COPY